

FIG. 1

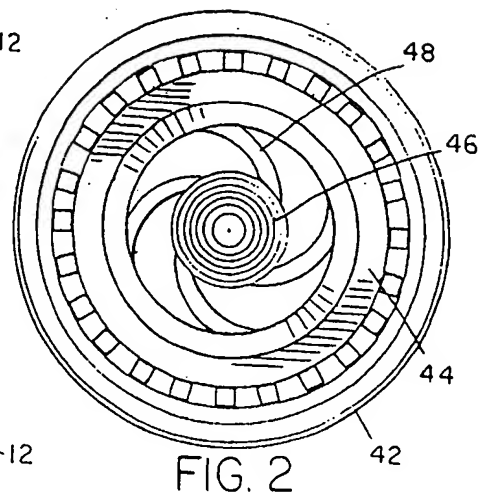


FIG. 2

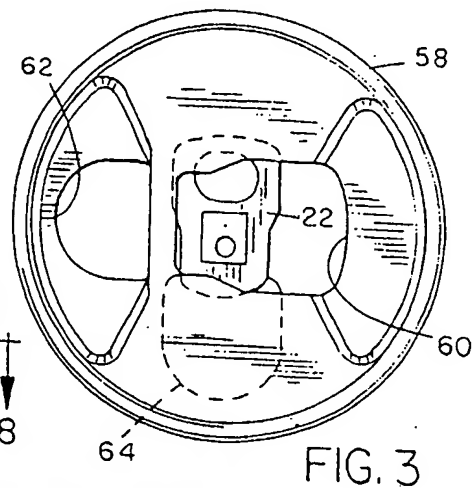


FIG. 3

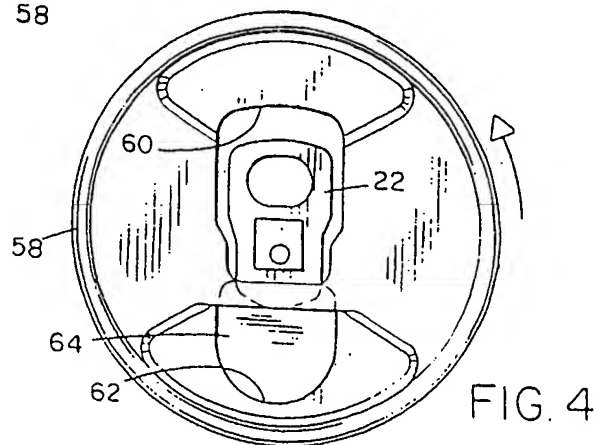


FIG. 4

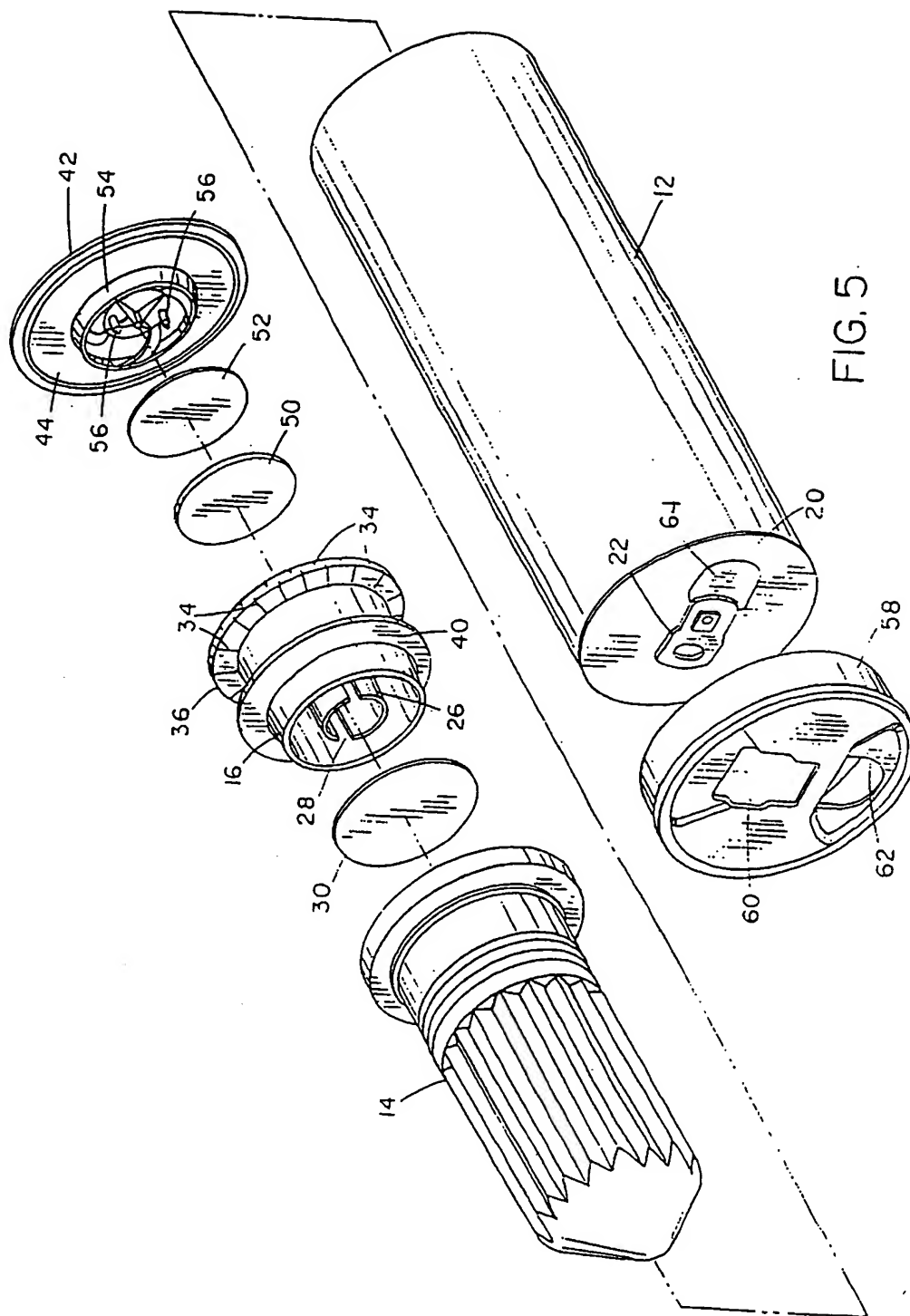
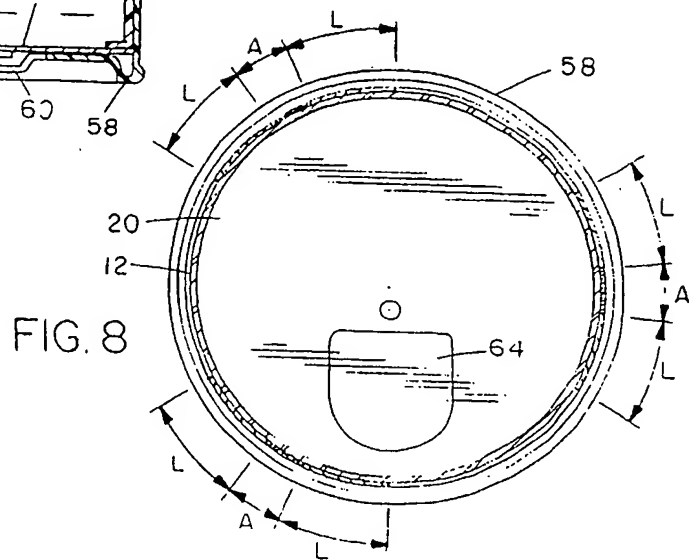
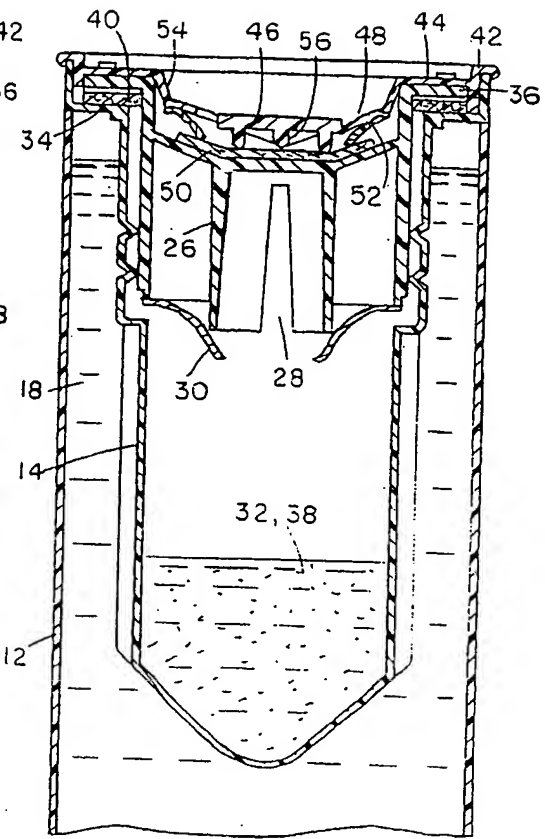
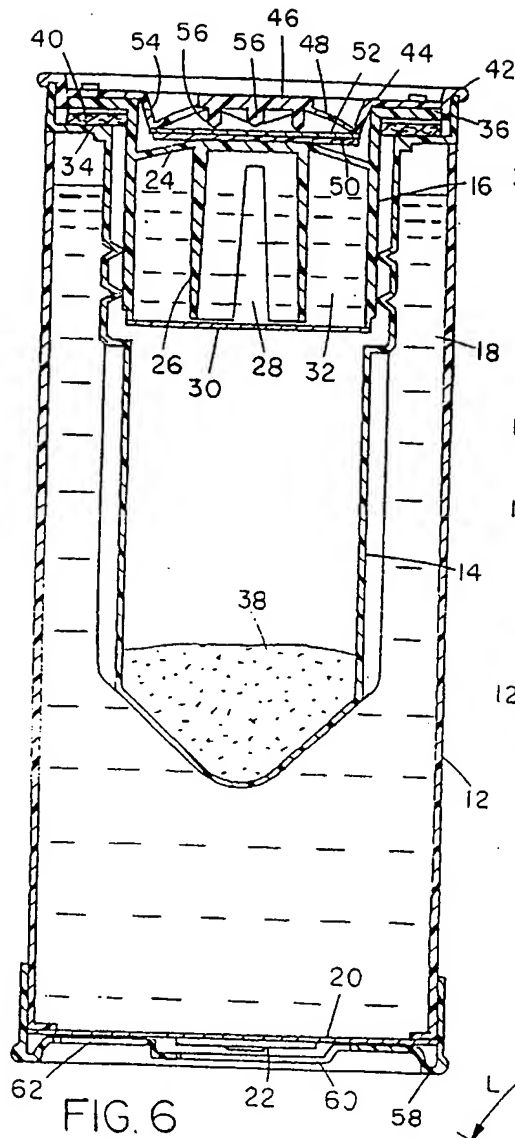


FIG. 5



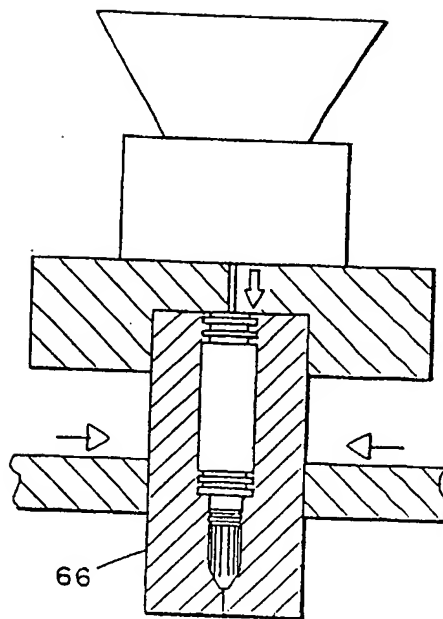


FIG. 9

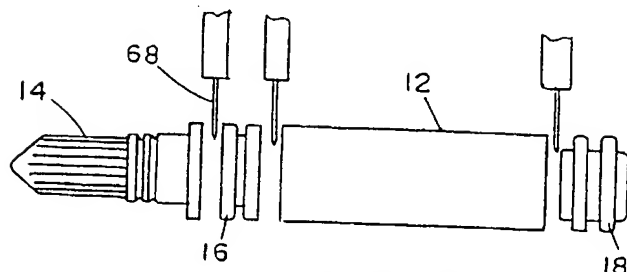


FIG. 10

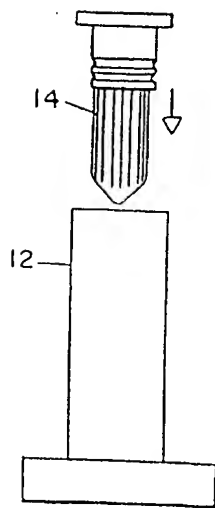


FIG. 11A

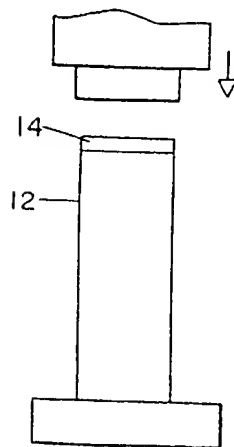


FIG. 11B

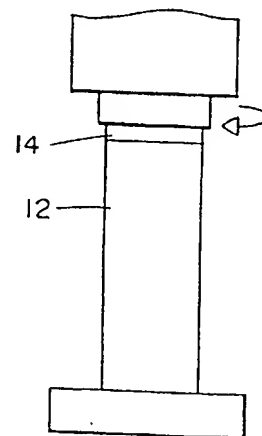


FIG. 11C

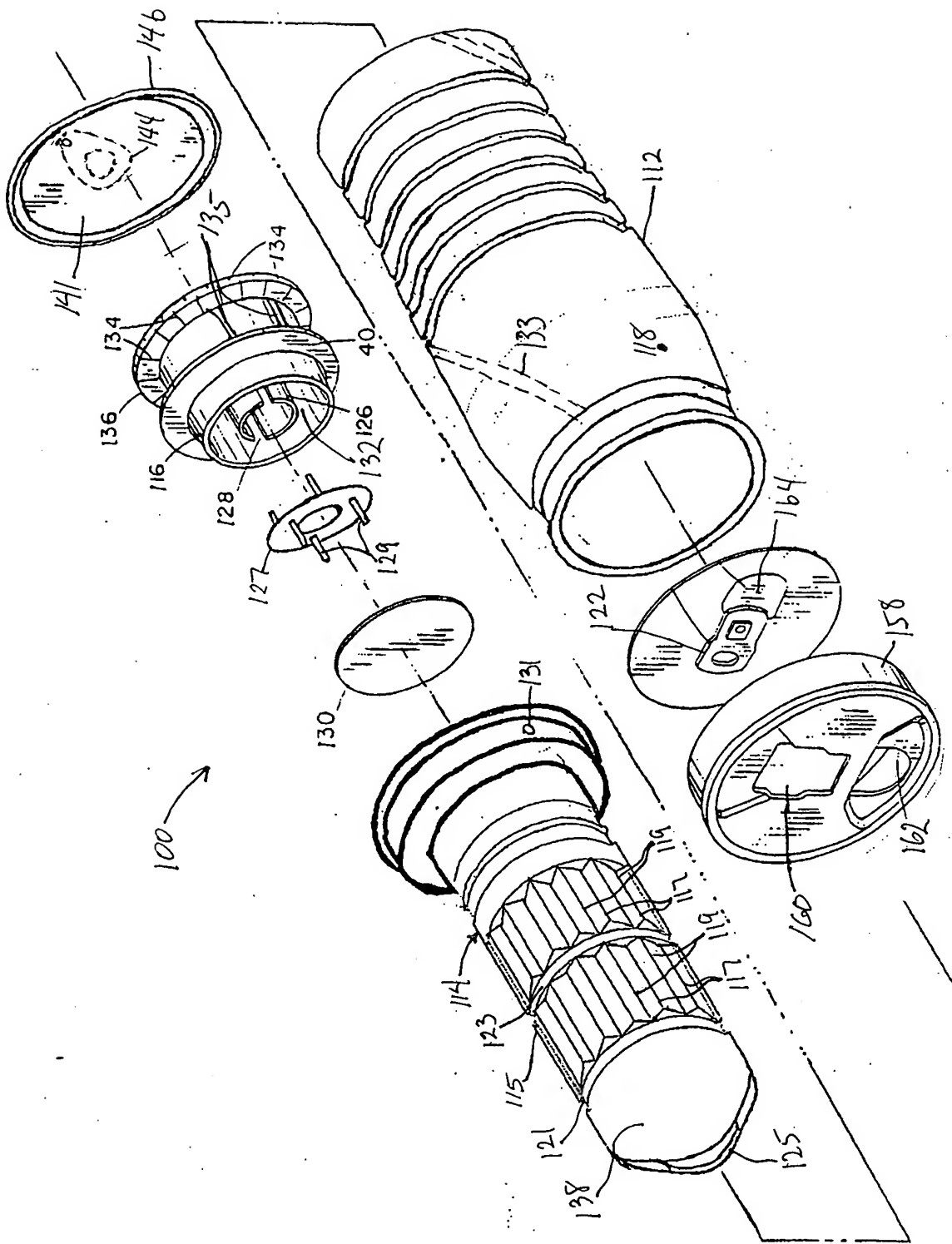


FIG. 12

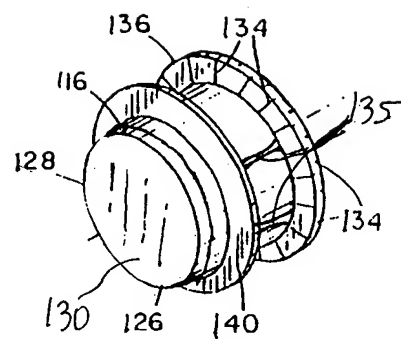
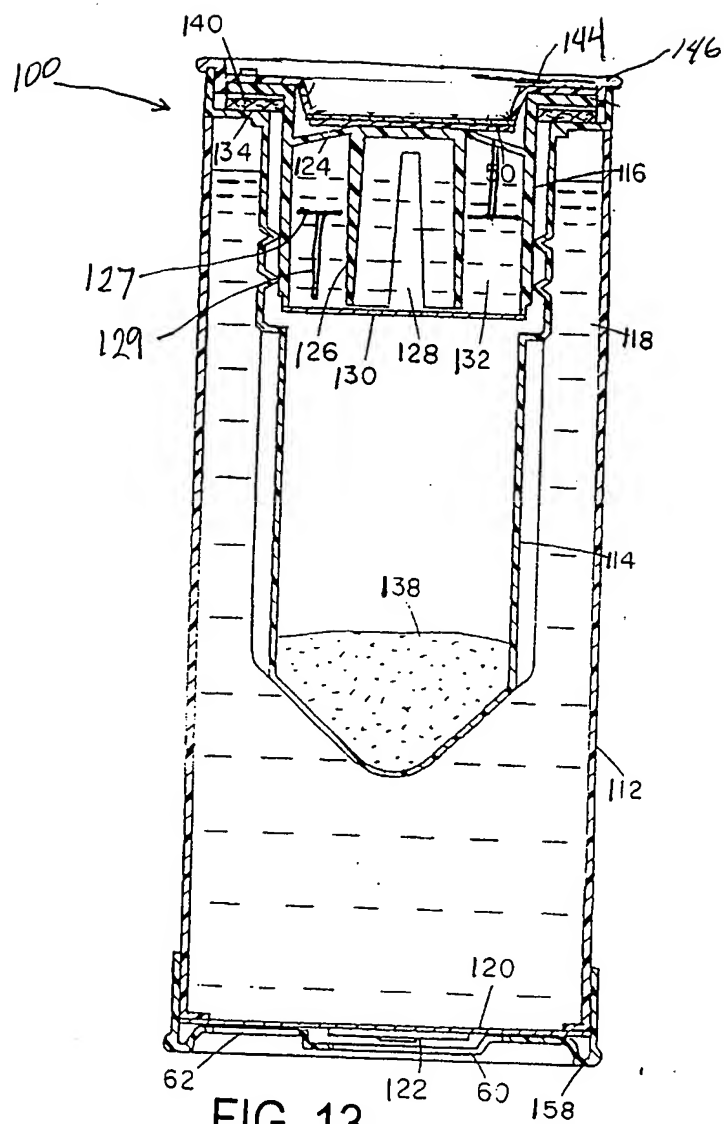
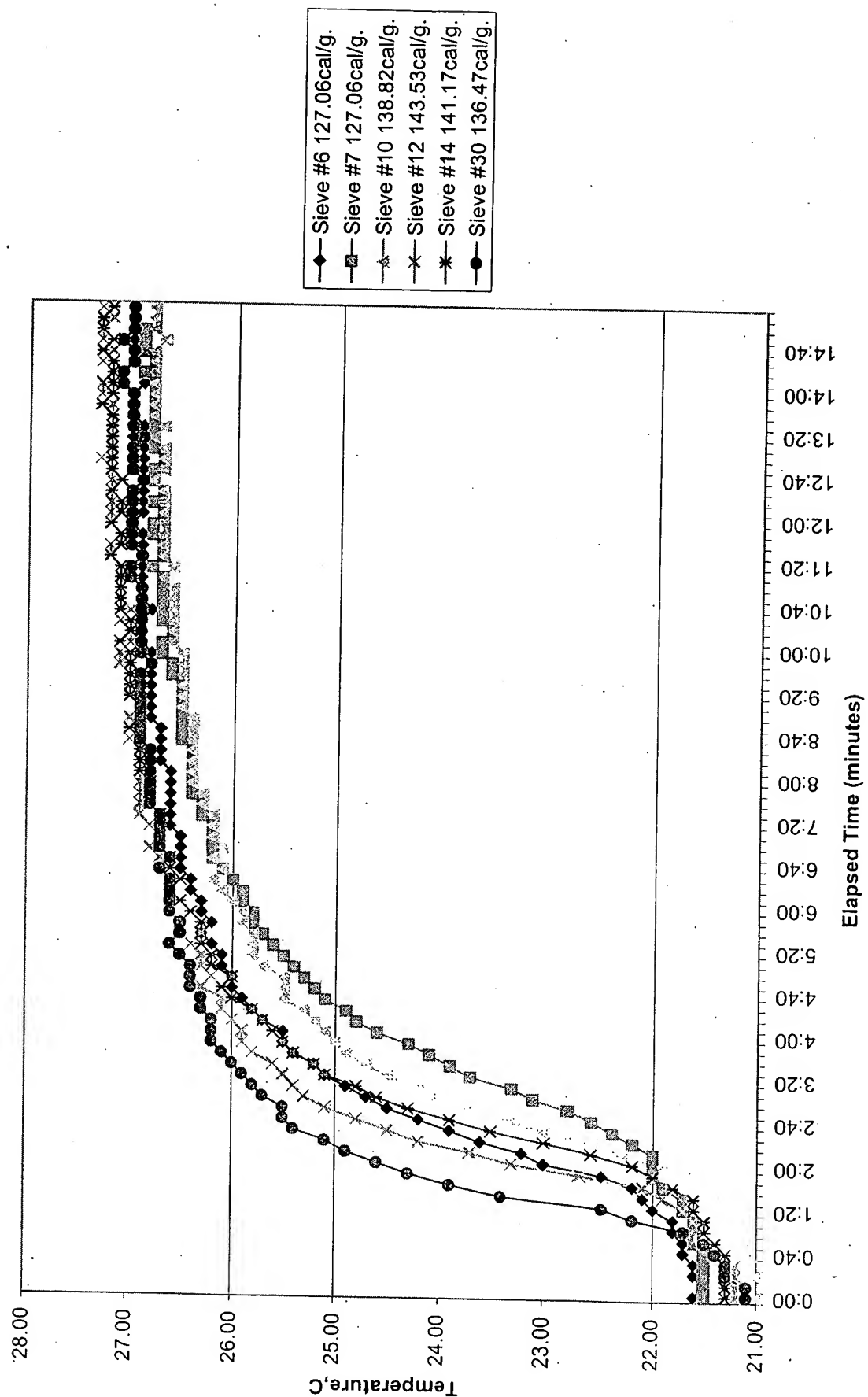


FIG. 15

Calories Generated from Various Screen Sizes



Calories Generated Per Particulate Size Sheet 1

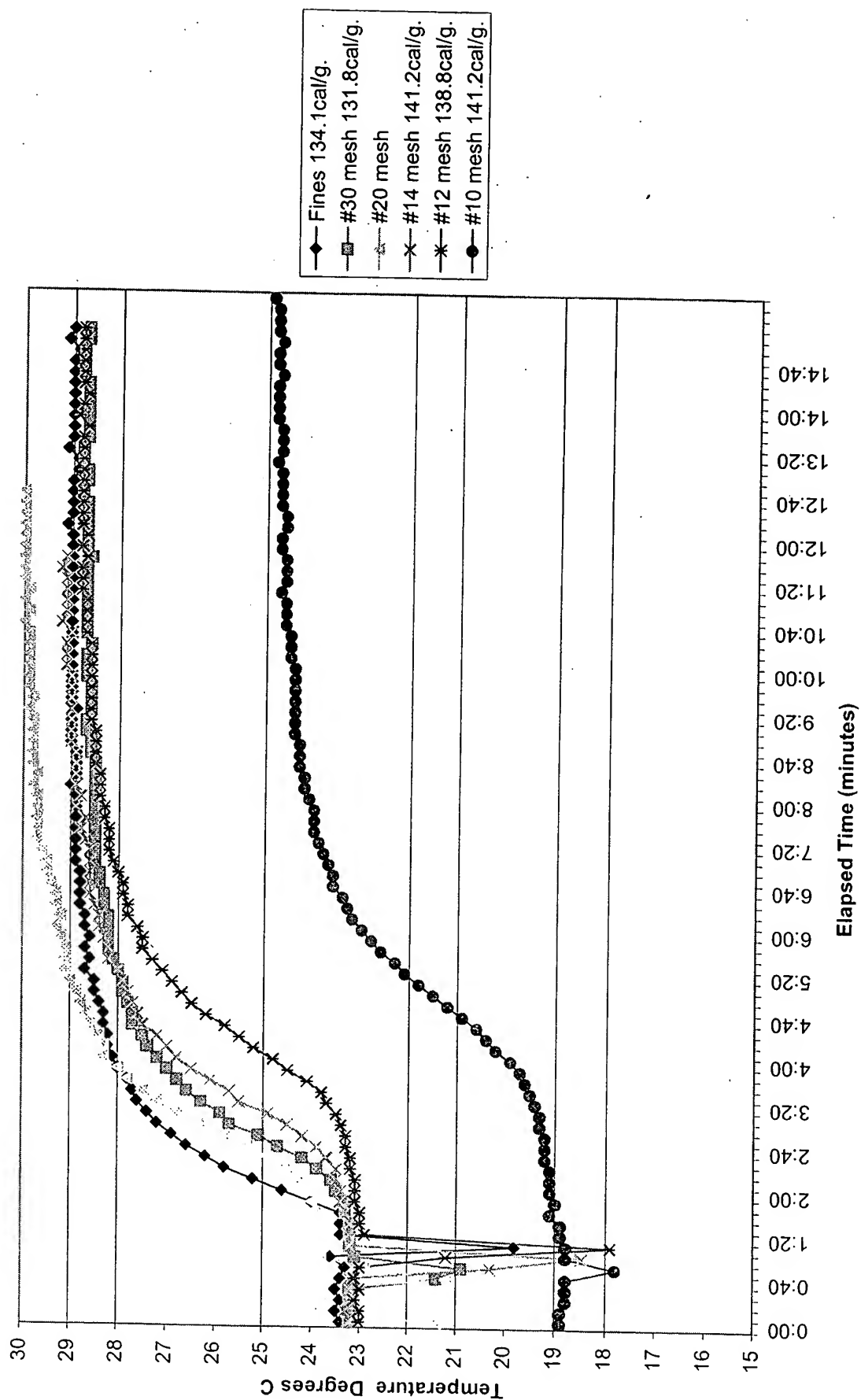


FIG. 17

Calories Generated Per Particulate Size Sheet 2

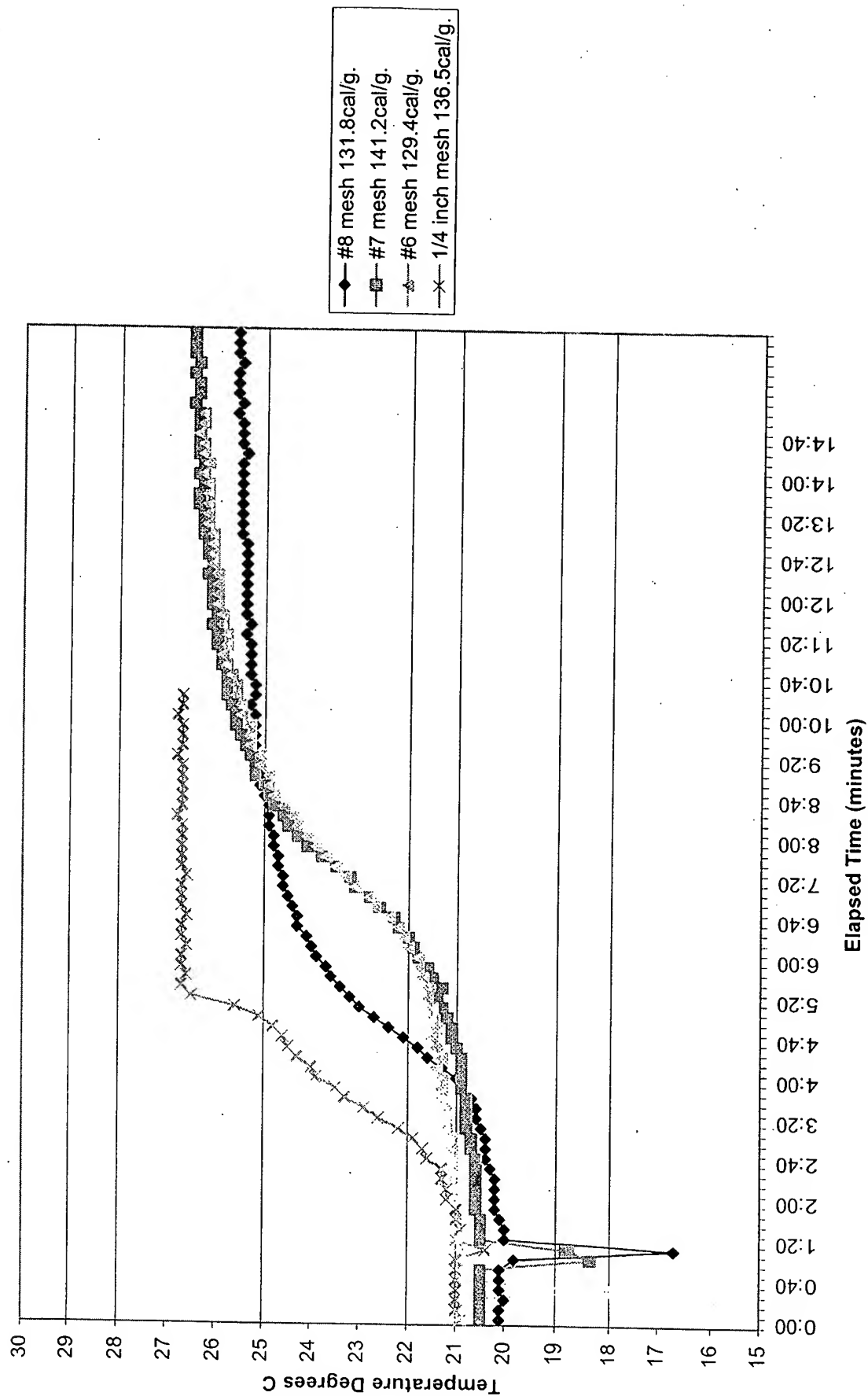


FIG. 18

Alternate Kiln Testing at Various Screen Sizes (4:1 ratio)

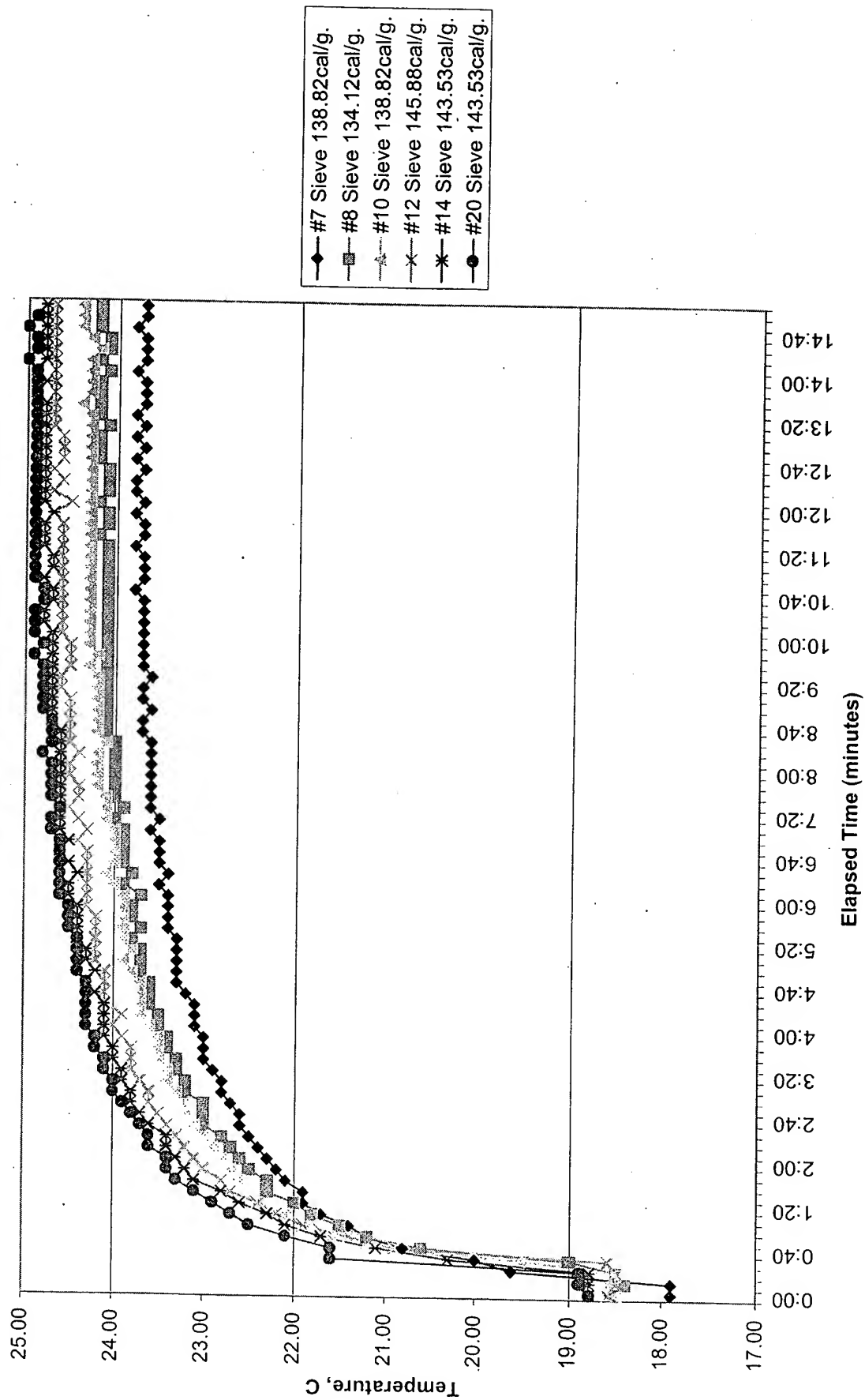


FIG. 19

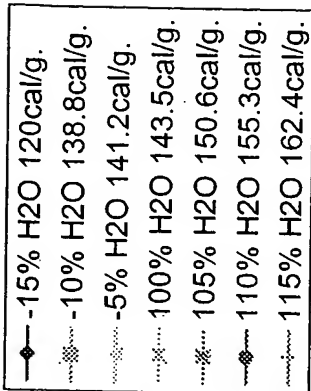


FIG. 20 Additional Calorie Generation with Increased Activation Water

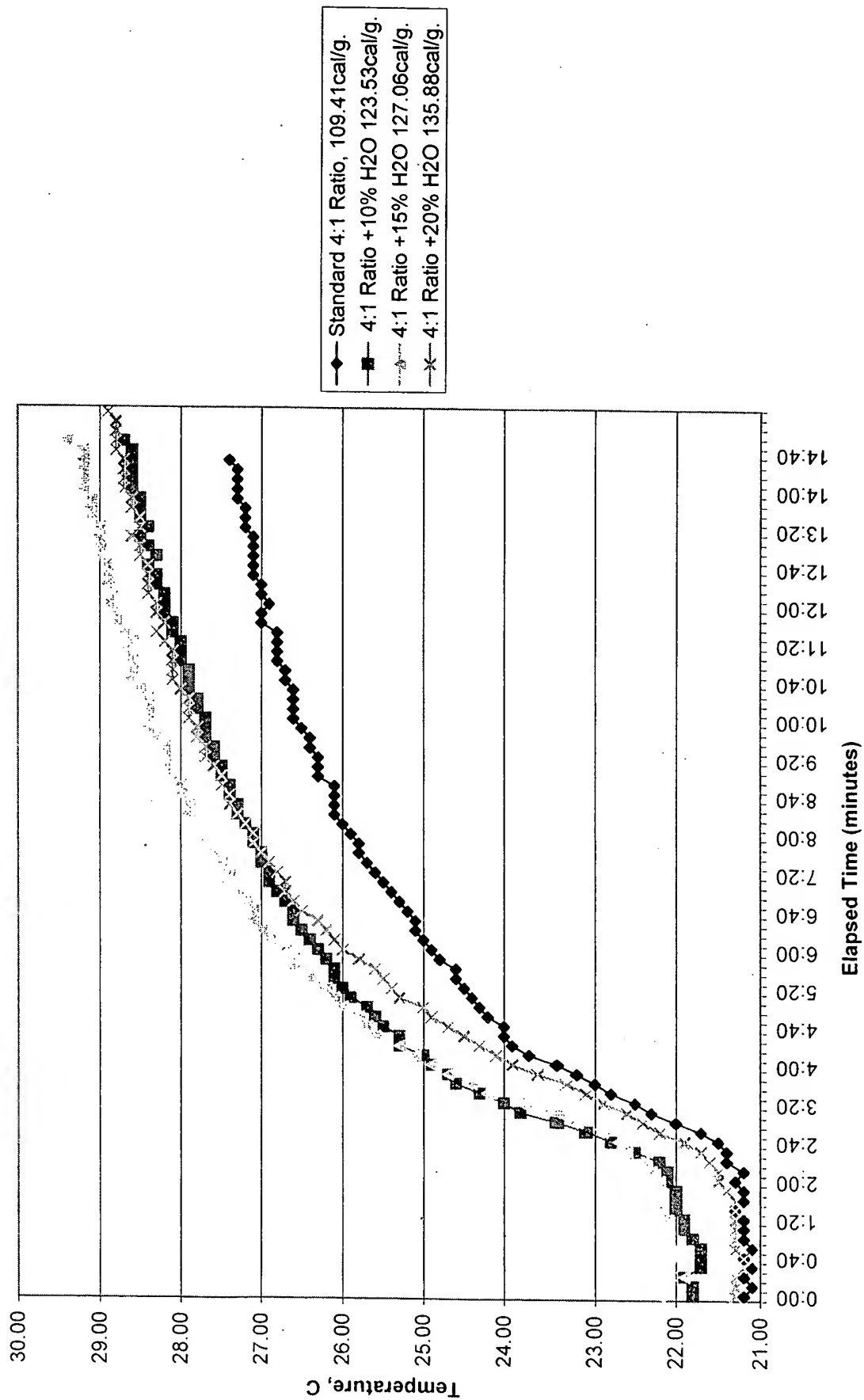


FIG. 21

Mineral components		Concentration (mg/L)
Bicarbonate	83.0	
Chloride	11.7	
Fluoride	ND	
Nitrate	ND	
Silica	28.0	
Sulfate	3.4	
Calcium	16.6	
Magnesium	3.3	
Potassium	1.3	
Sodium	11.7	
Total Dissolved Solids	130	
Hardness	55.0	
Heavy Metals	ND	
Arsenic	ND	
Trihalomethanes	ND	
pH	7.04	
Conductivity (µS)	250	

(ND = Not Detectable)

Property

Additive	Molecular Formula	Molecular weight	Physical State	Appearance	Odor	pH	Vapor Density	Evaporation rate	MP	Solubility	Specific Gravity/Density	Chemical Stability	Incompatibilities with Other Materials	Hazardous Decomposition Products
Sodium Benzoate	C ₇ H ₅ C ₂ Na	144.02	Crystalline powder	white	Characteristic odor	~8	4.97	negligible	>300C	Soluble in water	1.44	Stable under normal temps and pressures	Strong oxidizing agents	CO, CO ₂ , NaO
Fructose	C ₆ (H ₂ O) ₆	180.16g	white crystals	white	odorless				103-105C	Soluble in water		Stable under normal temps and pressures	Strong oxidizing agents	CO, CO ₂
Sucrose	C ₁₂ H ₂₂ O ₁₁	342.3g	Monoclinic sphenoidal crystals		Characteristic caramel	solutions are neutral to litmus			160-186C	1gm/0.5ml water	1.59	Stable under normal temps and pressures	Oxidizers, sulfuric acid, and nitric acid	CO, CO ₂
Citric Acid	C ₆ H ₈ O ₇	192.12g	white granules	white	odorless	2.2 (0.1N sol)			153C	60g/100ml at 20C	1.665	Stable under normal temps and pressures	Metal nitrates (explosive), alkali carbonates and bicarbonates, potassium tartrate. Will corrode copper, zinc, aluminum and their alloys	CO, CO ₂

FIG. 22